CLASS SPECIFICATION County of Fairfax, Virginia

<u>CLASS CODE</u>: 1867 <u>TITLE</u>: PROGRAMMER ANALYST III <u>GRADE</u>: S-28

DEFINITION:

Under general supervision, performs complex programming and analysis tasks (utilizing multiple platforms, languages, and databases), such as analysis and design for new development or existing system enhancements; working closely with the user to define requirements; writes program specifications; researches the use of new technologies; works on multiple project requests, applies programming and analysis skills with a detailed knowledge of the application; coordinates system testing and assists users with acceptance testing; develops work plans and organizes projects; assists in the development and maintenance of data and process models. Or, performs complex programming, analysis and planning tasks (utilizing multiple platforms, languages, and databases and software packages), such as planning and organizing moderately complex projects; facilitates the definition of user requirements, designs computer system requirements for the solution of difficult complex business problems and formulates procedures for their solutions; evaluates user requests for new or modified programs to determine feasibility, cost, and time requirements; ensures connectivity for complex systems which typically have multiple, layered interfaces; assists with the configuration management for both software and hardware. Or, serves as lead programmer on projects of moderate difficulty and complexity to develop and install new applications or complex enhancements. Performs advanced systems analysis tasks; meets with users to determine requirements; and performs related work as required.

<u>DISTINGUISHING CHARACTERISTICS OF THE CLASS:</u>

This is advanced programming and journey level systems analysis work. It is distinguished from the Programmer/Analyst II which performs and reviews program coding and testing while a Programmer/Analyst III determines system requirements and designs new systems or complex modifications. The Programmer/Analyst IV class is distinguished from the Programmer/Analyst III class by having full supervisory duties.

ILLUSTRATIVE DUTIES:

Serves as lead programmer in modifying complex existing systems and/or performs difficult and technically complex programming on new applications or complex enhancements;

Provides technical guidance and assistance to less experienced programmers;

Designs and implements new systems;

Prepares requests for programming;

Designs and implements system modifications and enhancements;

Designs system inputs, outputs, work flow processes, technical system and programming specifications;

Confers with users to determine system requirements and program acceptability and/or to define and analyze requests for program modifications or corrections;

Identifies and documents requirements using narratives, process flows and output samples; Develops technical program specifications and work plans; <u>CLASS CODE</u>: 1867 <u>TITLE</u>: PROGRAMMER ANALYST III <u>GRADE</u>: S-28

Page 2

Designs and documents procedural flows and file layouts;

Prepares procedural manuals and documentation for system users;

Trains system users;

Provides technical assistance to user departments;

Plans and conducts acceptance tests for new systems and modifications to existing systems;

Assures quality of system test results;

Provides analysis and documentation for programming;

Monitors program development, detects, analyzes, and solves systems and programming problems;

Responds to emergencies;

Serves as the project leader on new systems design projects or complex enhancements to existing systems;

Evaluates new or alternative approaches to systems development;

Develops programming schedules, assignments, and standards;

Identifies, defines, estimates, and prioritizes tasks;

Assigns tasks and documents schedule, reviews and refines plan;

Provides technical guidance, assistance, and training to staff;

Researches and evaluates new/proposed software and methodologies technology for effectiveness and applicability;

Assists in the development of requests for proposals and in the evaluation of responses;

Monitors contract performance and writes technical reports as needed;

Coordinates the implementation of systems with users and operations personnel;

Participates in meetings with user staffs and management personnel to define priorities, scope, resources, and time frames of projects;

Develops strategies for implementing new technologies and standards and for addressing performance issues and problem resolution;

Monitors and evaluates the effectiveness of installed data processing systems;

Tests, evaluates, and debugs software systems prior to installation;

Writes new or modifies existing computer programs;

Tests and debugs computer programs and corrects program logic when necessary;

Develops programs to satisfy special requests for information from user personnel;

Provides assistance to other staff as needed;

Provides training, guidance, and assistance to less experienced programmer/analysts;

May prepare reports on information collected.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Considerable knowledge of programming practices necessary for providing instructions for a computer;

Considerable knowledge of multi-platform computer languages, programming principles, and particular operating characteristics of the hardware on which the language is processing;

Knowledge of the principles of systems design and analysis and modern techniques in systems analysis;

Knowledge of the capabilities and the operating requirements of various computer platforms functioning in centralized, distributed, client server, and stand-alone environments; Knowledge of block diagramming, flow charting, and procedural report writing;

<u>CLASS CODE</u>: 1867 <u>TITLE</u>: PROGRAMMER ANALYST III <u>GRADE</u>: S-28

Page 3

Ability to plan, organize, and conduct system analysis and to evaluate administrative processes and procedures;

Ability to provide guidance and assistance to technical employees and to review their work; Ability to efficiently monitor program development and thoroughly document necessary system modifications and enhancements;

Ability to establish and maintain effective business relationships;

Ability to prepare clear, structured programs of a highly complex nature for efficient machine utilization;

Ability to write comprehensible user system documentation;

Ability to communicate with users and translate technical matters into understandable terms.

EMPLOYMENT STANDARDS:

Any combination of education, experience, and training equivalent to the following: Possession of an associate's degree in computer science, or related field, and five years' programming/analysis experience; or possession of a bachelor's degree in computer science, or closely related field; PLUS

Three years' programming/analysis experience in a complex information systems environment.

CERTIFICATES AND LICENSES REQUIRED:

None.

REGRADED July 8, 2006 ESTABLISHED: May 24, 1999